Figure 1.

```
Consensus   MQ.A.A...A...KAA.GD.L...F.L.PDLLE.AN.S.NASLQL.DLWWELGLELPDGAAPGHPPG.GGAES.DTEAR

Human       MQMADAATIATMNKAAGGDKLAELFSLVPDLLEAANTSGNASLQLPDLWWELGLELPDGAPPGHPPGSGGAESADTEAR
Mouse       MQVASATPAATVRKAAAGDELSEFFALTPDLLEVANASGNASLQLQDLWWELGLELPDGAAPGHPPGGGGAESTDTEAR
Rat         MQVASATTAAPMSKAAAGDELSGFFGLIPDLLEVANRSSNASLQLQDLWWELGLELPDGAAPGHPPGSGGAESADTEAR

Consensus   VRILIS.VYWVVCALGLAGNLLVLYLMKS.QGWRKSSINLFVTNLALTDFQFVLTLPFWAVENALDFKWPFGKAMCKIV

Human       VRILISVVYWVVCALGLAGNLLVLYLMKSMQGWRKSSINLFVTNLALTDFQFVLTLPFWAVENALDFKWPFGKAMCKIV
Mouse       VRILISAVYWVVCALGLAGNLLVLYLMKSKQGWRKSSINLFVTNLALTDFQFVLTLPFWAVENALDFKWPFGKAMCKIV
Rat         VRILISAVYWVVCALGLAGNLLVLYLMKSKQGWRKSSINLFVTNLALTDFQFVLTLPFWAVENALDFKWPFGKAMCKIV

Consensus   SMVTSMNMYASVFFLTAMSV.RYHSVASALKSHRTRG.GRGDCCG.SL..SCCFSAK.LC..IWA.AA.ASLP..IFST

Human       SMVTSMNMYASVFFLTAMSVTRYHSVASALKSHRTRGHGRGDCCGRSLGDSCCFSAKALCVWIWALAALASLPSAIFST
Mouse       SMVTSMNMYASVFFLTAMSVARYHSVASALKSHRTRGRGRGDCCGQSLRESCCFSAKVLCGLIWASAALASLPNAIFST
Rat         SMVTSMNMYASVFFLTAMSVARYHSVASALKSHRTRGHGRGDCCGQSLGESCCFSAKVLCGLIWASAAIASLPNVIFST

Consensus   T..V.GEELCL..FPDKLLG.DRQFWLGLYH.QKVLLGF.LPL.II.LCYLLLVRFI.DRR..GT......A...GG..

Human       TVKVMGEELCLVRFPDKLLGRDRQFWLGLYHSQKVLLGFVLPLGIIILCYLLLVRFIADRRAAGTK---GGAAVAGGRP
Mouse       TIRVLGEELCLMHFPDKLLGWDRQFWLGLYHLQKVLLGFLLPLSIISLCYLLLVRFISDRRVVGTTDAVGAAAAPGGGL
Rat         TINVLGEELCLMHFPDKLLGWDRQFWLGLYHLQKVLLGFLLPLSIISLCYLLLVRFISDRRVVGTTDG---ATAPGGSL

Consensus   ..A.ARR.SKVTKSVTIVVLSFFLCWLPNQALTTWSILIKFN.VPFSQEYF.CQVYAFPVSVCLAHSNSCLNP.LYCLV

Human       TGASARRLSKVTKSVTIVVLSFFLCWLPNQALTTWSILIKFNAVPFSQEYFLCQVYAFPVSVCLAHSNSCLNPVLYCLV
Mouse       STASARRRSKVTKSVTIVVLSFFLCWLPNQALTTWSILIKFNAVPFSQEYFQCQVYAFPVSVCLAHSNSCLNPILYCLV
Rat         STAGARRRSKVTKSVTIVVLSFFLCWLPNQALTTWSILIKFNVVPFSQEYFQCQVYAFPVSVCLAHSNSCLNPILYCLV

Consensus   RREFRKALK.LLWRIASPS.T.MRPFTATTKPE.ED.GLQA.AP..A.AEPDL.YYPPGVVVYSGGRYDLLPSSSAY

Human       RREFRKALKSLLWRIASPSITSMRPFTATTKPEHEDQGLQAPAPPHAAAEPDLLYYPPGVVVYSGGRYDLLPSSSAY.
Mouse       RREFRKALKNLLWRIASPSLTNMRPFTATTKPEPEDHGLQALAPLNAAAEPDLIYYPPGVVVYSGGRYDLLPSSSAY.
Rat         RREFRKALKNLLWRIASPSLTSMRPFTATTKPEPEDHGLQALAPLNATAEPDLIYYPPGVVVYSGGRYDLLPSSSAY.
```

Title: ***Relaxin3-GPCR 135 Complexes And Their Production And Use***
Inventor(s): Chen et al
Docket No. PRD2045NP-US
Appln. No.: *To Be Assigned*

Figure 2.

GPCR135 Ligand Activity in Different Tissues

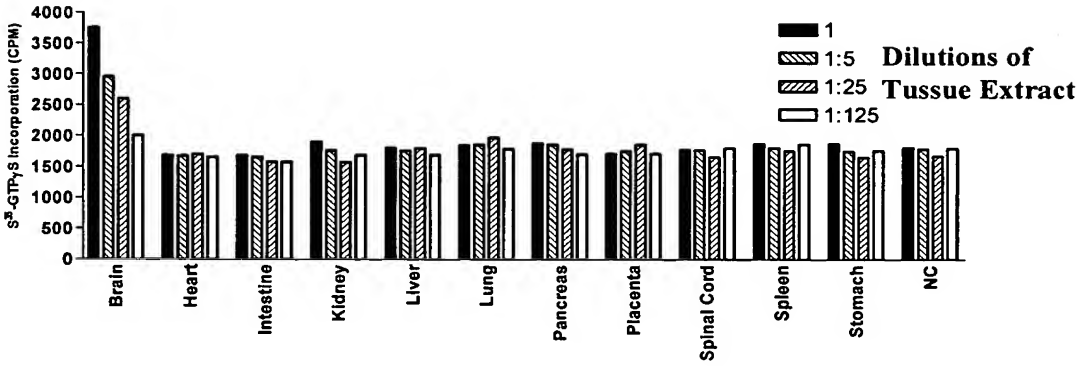


Figure 3.

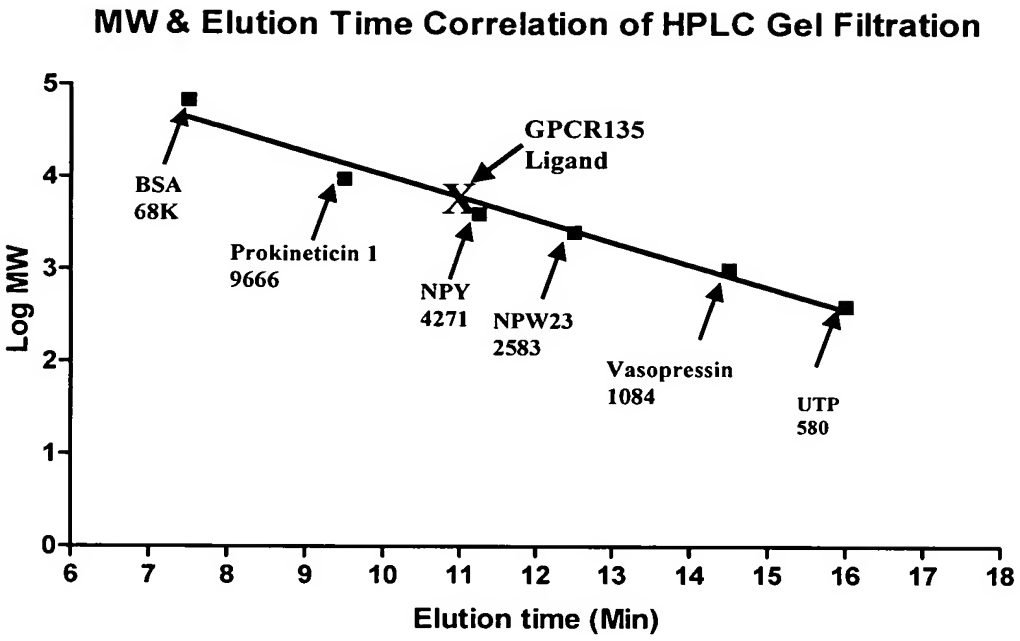
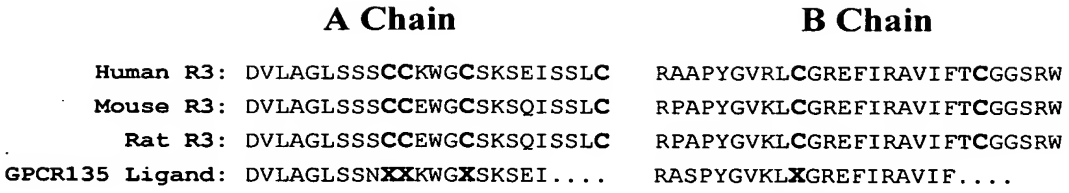

MW & Elution Time Correlation of HPLC Gel Filtration
Log MW
Elution time (Min)
BSA
68K
Prokineticin 1
9666
GPCR135
Ligand
NPY
4271
NPW23
2583
Vasopressin
1084
UTP
580

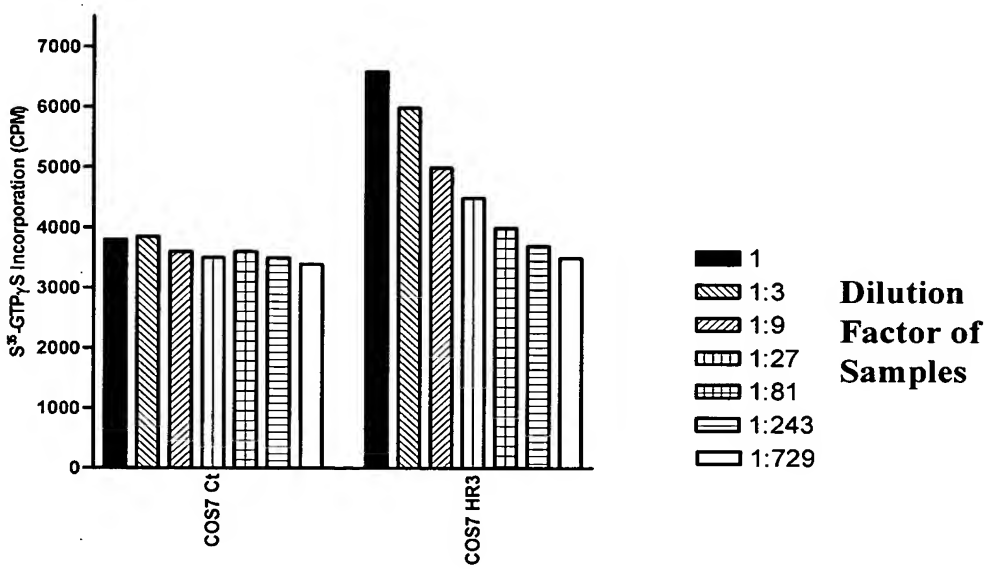
Figure 4.



Title: *Relaxin3-GPCR 135 Complexes And Their Production And Use*
Inventor(s): Chen et al
Docket No. PRD2045NP-US
Appln. No.:*To Be Assigned*

Figure 5.

GPCR135 Ligand Activity in Cell Culture Medium of Relaxin 3 Transfected COS7 Cells



Title: *Relaxin3-GPCR 135 Complexes And Their Production And Use*
Inventor(s): Chen et al
Docket No. PRD2045NP-US
Appln. No.:*To Be Assigned*

Figure 6.

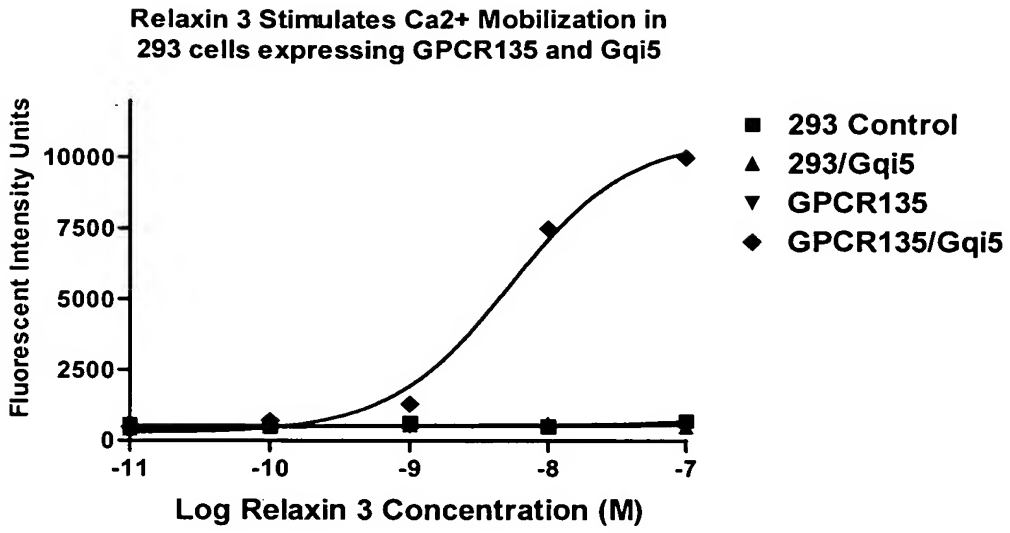

Relaxin 3 Stimulates Ca2+ Mobilization in
293 cells expressing GPCR135 and Gqi5
Fluorescent Intensity Units
10000
7500
5000
2500
0
-11
-10
-9
-8
-7
Log Relaxin 3 Concentration (M)
293 Control
293/Gqi5
GPCR135
GPCR135/Gqi5

Figure 7.

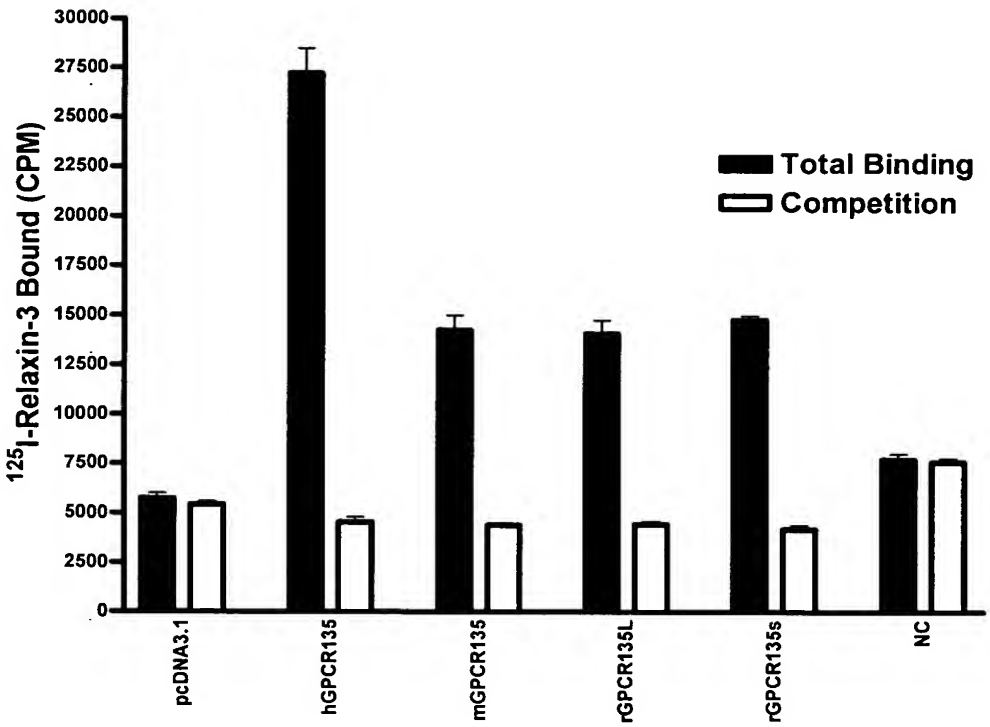
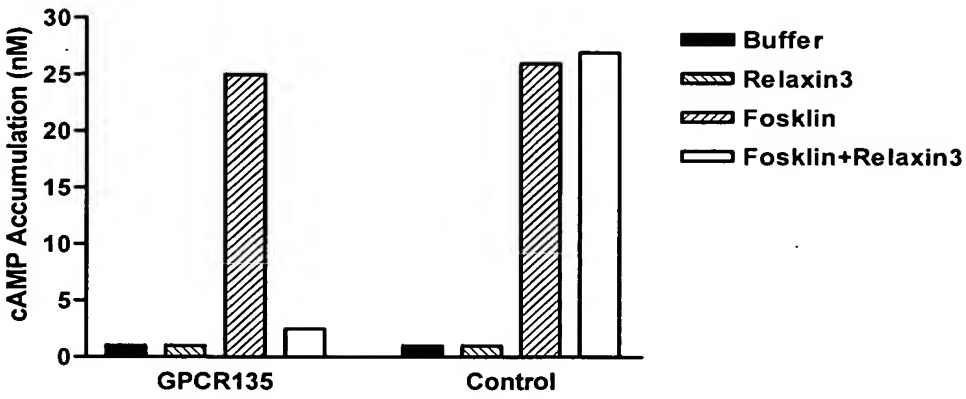

30000
27500
25000
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
^{125}I-Relaxin-3 Bound (CPM)
Total Binding
Competition
pcDNA3.1
hGPCR135
mGPCR135
rGPCR135L
rGPCR135s
NC

Figure 8.


cAMP Accumulation (nM)
30
25
20
15
10
5
0
GPCR135
Control
Buffer
Relaxin3
Fosklin
Fosklin+Relaxin3